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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,341	11/29/2001	Harold R. Garner	119929-1040	5540

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EXAMINER

FORMAN, BETTY J

ART UNIT

PAPER NUMBER

1634

DATE MAILED: 06/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/998,341	GARNER, HAROLD R.	
	Examiner	Art Unit	
	BJ Forman	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>03/02</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Preliminary Remarks

1. Applicant's Amendment to the specification is acknowledged. The amendment has been thoroughly reviewed and entered.
2. Applicant's submission of a copy of the Declaration filed under 37 C.F.R. 1.131 in parent application U.S. Patent No. 6,295,153 is acknowledged. The Declaration states that the invention claimed in the '153 patent was reduced to practice prior to 21 February 1998 and prior to 23 February 1998 which are the effective filing dates for the Gao et al and Cerrina et al references respectively.

The Declaration has been reviewed but is not deemed adequate to overcome the GAO Et Al and Cerrina et al references for three reasons. First, the Declaration states that the invention claimed in the '153 patent was reduced to practice prior to 21 February 1998 but the Declaration does not state that the instantly claimed invention was reduced to practice prior to 21 February 1998. Second, scope of the instant claims differs from the scope of the '153 claims. Third, as discussed below, the invention of Claims 41 and 48-56 was not disclosed in the parent application. Therefore, any declaration regarding invention claimed in the '153 patent is not relevant to the instantly claimed invention. For these reasons, the Declaration is not deemed adequate to overcome the prior art teachings of Gao et al and Cerrina et al.

Priority

3. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 42 and 51 of this application. Claims 42 and 51 are drawn to a lens system which changes magnification of light reflected by the micromirror. However, the provisional application fails to provide adequate support for this limitation. The provisional application, page 13, lines 1-2, teaches that the apparatus comprises a lens. However, the provisional application does not teach or describe a "lens system" or a lens which changes magnification of light reflected by the micromirror. Therefore, the provisional application fails to provide adequate support for instant claims 42 and 51.

Furthermore, the provisional application fails to provide adequate support for Claims 48-56 of this application. Claims 48-56 are drawn to an apparatus comprising "one or more reactant lines". However, the provisional application fails to provide adequate support for this limitation. The provisional application, page 13, lines 10-12, teaches that chemicals are pumped into and evacuated from the reaction chamber via chemical inlets/outlets and the application defines the inlets and outlets on page 14, line 25, i.e. reagent delivery-syringe injectors into header. However, the specification does not teach or begin to describe the instantly claimed "reactant lines". Therefore, the provisional application fails to provide adequate support for instant claims 48-56.

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Specification

4. The amendment filed in the Provisional Application of 11 April 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Claims 42 and 51 recite "a lens system, wherein the lens system changes the magnification of light reflected by the micromirror." While parent application U.S. Patent No. 6,295,153 (Column 6, lines 11-12) and the instant specification (page 13, lines 6-7) teach that the apparatus comprises a lens, the parent and instant specifications do not teach or describe a "lens system" or a lens which changes magnification of light reflected by the micromirror.

As such the amendments introduce new matter.

Claims 48-56 are drawn to an apparatus comprising "one or more reactant lines". While the parent application U.S. Patent No. 6,295,153 (Column 6, lines 24-28 and Column 7, line 17) and the instant specification (page 13, lines 15-17 and page 14, line 27) teach that chemicals are pumped into and evacuated from the reaction chamber via chemical inlets/outlets i.e. reagent delivery-syringe injectors into header, the parent and instant specifications do not teach the newly recited "reactant lines". As such the amendments introduce new matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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6. Claims 42 and 48-56 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention

The recitation "a lens system, wherein the lens system changes the magnification of light reflected by the micromirror." is added to new claims 42 and 51. However, the specification fails to define or provide any disclosure to support such claim recitation.

The recitation "reactant lines" is added to new independent claim 48 from which claims 49-56 depend. However, the specification fails to define or provide any disclosure to support such claim recitation.

MPEP 2163.06 notes "IF NEW MATTER IS ADDED TO THE CLAIMS, THE EXAMINER SHOULD REJECT THE CLAIMS UNDER 35 U.S.C. 112, FIRST PARAGRAPH - WRITTEN DESCRIPTION REQUIREMENT. *IN RE RASMUSSEN*, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981)." MPEP 2163.02 teaches that "Whenever the issue arises, the fundamental factual inquiry is whether a claim defines an invention that is clearly conveyed to those skilled in the art at the time the application was filed...If a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application." MPEP 2163.06 further notes "WHEN AN AMENDMENT IS FILED IN REPLY TO AN OBJECTION OR REJECTION BASED ON 35 U.S.C. 112, FIRST PARAGRAPH, A STUDY OF THE ENTIRE APPLICATION IS OFTEN NECESSARY TO DETERMINE WHETHER OR NOT "NEW MATTER" IS INVOLVED. APPLICANT SHOULD THEREFORE SPECIFICALLY POINT OUT THE SUPPORT FOR ANY AMENDMENTS MADE TO THE DISCLOSURE" (emphasis added).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent

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or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 39-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Cerrina et al (U.S. Patent No. 6,375,903, filed 23 February 1998).

Regarding Claim 39, Cerrina et al disclose an apparatus comprising a light source, a computer-controlled micromirror positioned to redirect light from the light source toward the substrate, and a reaction chamber (Column 4, lines 45-65).

Regarding Claim 40, Cerrina et al disclose the apparatus wherein the light source comprises a UV light (Column 4, lines 66-67).

Regarding Claim 41, Cerrina et al disclose the apparatus further comprising a lens (Column 5, lines 1-29).

Regarding Claim 42, Cerrina et al disclose the apparatus wherein the lens comprises a lens system which changes magnification of light reflected by the micromirror (Column 5, lines 25-40).

Regarding Claim 43, Cerrina et al disclose the apparatus wherein the micromirror is a micromirror array (Column 5, lines 41-43).

Regarding Claim 44, Cerrina et al disclose the apparatus wherein the light catalyzes synthesis (Column 6, lines 44-67). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

The courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure rather than function see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). "[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (see MPEP, 2114).

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Regarding Claim 45, Cerrina et al disclose the apparatus wherein the light catalyzes synthesis (Column 6, lines 44-67). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 46, Cerrina et al disclose the apparatus wherein the light catalyzes a reaction (Column 6, lines 44-67). However, it is noted that the recitation "catalyzes a reaction" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 47, Cerrina et al disclose the apparatus wherein the light crosslinks a molecule (Column 6, lines 44-67). However, it is noted that the recitation "crosslinks a molecule" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 48, Cerrina et al disclose an apparatus comprising a light source, a micromirror positioned to redirect light from the light source toward a substrate, a reaction chamber disposed on the substrate, one or more reactant lines connected to the chamber Fig. 1, # 20 and #21), one or more reaction chemicals connected to the reactant lines and a computer connected to and controlling the micromirror and the supply of reactants (Column 4, line 45-Column 5, line 40).

Regarding Claim 49, Cerrina et al disclose the apparatus wherein the light source comprises a UV light (Column 4, lines 66-67).

Regarding Claim 50, Cerrina et al disclose the apparatus further comprising a lens (Column 5, lines 1-29).

Regarding Claim 51, Cerrina et al disclose the apparatus wherein the lens comprises a lens system which changes magnification of light reflected by the micromirror (Column 5, lines 25-40).

Regarding Claim 52, Cerrina et al disclose the apparatus wherein the micromirror is a micromirror array (Column 5, lines 41-43).

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Regarding Claim 53, Cerrina et al disclose the apparatus wherein the light catalyzes synthesis (Column 6, lines 44-67). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 54, Cerrina et al disclose the apparatus wherein the light catalyzes synthesis (Column 6, lines 44-67). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 55, Cerrina et al disclose the apparatus wherein the light catalyzes a reaction (Column 6, lines 44-67). However, it is noted that the recitation "catalyzes a reaction" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 56, Cerrina et al disclose the apparatus wherein the light crosslinks a molecule (Column 6, lines 44-67). However, it is noted that the recitation "crosslinks a molecule" is functional language which does not describe or define structural properties of the apparatus.

9. Claims 39-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Gao et al (U.S. Patent No. 6,426,184, filed 1 February 1998).

Regarding Claim 39, Gao et al disclose an apparatus comprising a light source, a computer-controlled micromirror positioned to redirect light from the light source toward the substrate, and a reaction chamber (Column 24, line 58-Column 30, line 8).

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Regarding Claim 40, Gao et al disclose the apparatus wherein the light source comprises a UV light (Column 3, lines 27-28).

Regarding Claim 41, Gao et al disclose the apparatus further comprising a lens (Column 24, lines 61-65).

Regarding Claim 42, Gao et al disclose the apparatus wherein the lens comprises a lens system which changes magnification of light reflected by the micromirror (Column 24, lines 61-65).

Regarding Claim 43, Gao et al disclose the apparatus wherein the micromirror is a micromirror array (Column 25, lines 33-45).

Regarding Claim 44, Gao et al disclose the apparatus wherein the light catalyzes synthesis (Column 4, lines 47-67). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 45, Gao et al disclose the apparatus wherein the light catalyzes synthesis (Column 4, lines 47-67). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 46, Gao et al disclose the apparatus wherein the light catalyzes a reaction (Column 4, lines 47-67). However, it is noted that the recitation "catalyzes a reaction" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 47, Gao et al disclose the apparatus wherein the light crosslinks a molecule (Column 4, lines 47-67). However, it is noted that the recitation "crosslinks a molecule" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 48, Gao et al disclose an apparatus comprising a light source, a micromirror positioned to redirect light from the light source toward a substrate, a reaction

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chamber disposed on the substrate, one or more reactant lines connected to the chamber (Fig. 10, #1012 and #1013 and Column 28, lines 60-63), one or more reaction chemicals connected to the reactant lines and a computer connected to and controlling the micromirror and the supply of reactants (Column 24, line 58-Column 30, line 8).

Regarding Claim 49, Gao et al disclose the apparatus wherein the light source comprises a UV light (Column 3, lines 27-28).

Regarding Claim 50, Gao et al disclose the apparatus further comprising a lens (Column 24, lines 61-65).

Regarding Claim 51, Gao et al disclose the apparatus wherein the lens comprises a lens system which changes magnification of light reflected by the micromirror (Column 24, lines 61-65).

Regarding Claim 52, Gao et al disclose the apparatus wherein the micromirror is a micromirror array (Column 25, lines 33-45).

Regarding Claim 53, Gao et al disclose the apparatus wherein the light catalyzes synthesis (Column 4, lines 47-67). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 54, Gao et al disclose the apparatus wherein the light catalyzes synthesis (Column 4, lines 47-67). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 55, Gao et al disclose the apparatus wherein the light catalyzes a reaction (Column 4, lines 47-67). However, it is noted that the recitation "catalyzes a reaction" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 56, Gao et al disclose the apparatus wherein the light crosslinks a molecule (Column 4, lines 47-67). However, it is noted that the recitation "crosslinks a

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molecule" is functional language which does not describe or define structural properties of the apparatus.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 39-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al (U.S. Patent No. 5,959,098 filed 17 April 1996) in view of Sweatt et al (U.S. Patent No. 5,870,176, filed 18 June 1997).

Regarding Claim 39, Goldberg et al teach an apparatus comprising a light source, a computer-controlled mirrors positioned to redirect light from the light source toward the substrate, and a reaction chamber (Column 15, lines 13-65; Column 16, line 55-67; and Fig. 3A, 4A and 4C). Goldberg et al teach the apparatus comprises mirrors (Column 15, lines 15-19) but they do not specifically teach the mirrors are micromirrors. Sweatt et al teach the similar apparatus wherein the mirrors are micromirrors which replace the need for masks traditionally used in lithography (Column 2, lines 39-65). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the micromirrors of Sweatt et al to the mirrored light direction of Goldberg et al thereby eliminating the need for

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masks the problems resulting from masks i.e. alignment and mask defects as taught by Sweatt et al (Column 2, lines 1-12).

Regarding Claim 40, Goldberg et al teach the apparatus wherein the light source comprises a UV light (Column 17, lines 14-15) and Sweatt et al teach the apparatus wherein the light source is UV light (Column 6, lines 25-40).

Regarding Claim 41, Goldberg et al teach the apparatus further comprising a lens (Column 15, lines 15-19).

Regarding Claim 42, Goldberg et al teach the apparatus wherein the lens comprises a lens system which changes magnification of light reflected by the micromirror (Column 26, lines 58/-65).

Regarding Claim 43, Goldberg et al teach the apparatus comprises mirrors (Column 15, lines 15-19) but the do not specifically the mirror is a micromirror array. However, Sweatt et al teach the similar apparatus wherein the micromirror is a micromirror array (Column 2, lines 38-65).

Regarding Claim 44, Goldberg et al teach the apparatus wherein the light is catalytic (Column 17, lines 25-43) and Sweatt et al teach the apparatus wherein the light is catalytic (Column 4, lines 45-57). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 45, Goldberg et al teach the apparatus wherein the light is catalytic (Column 17, lines 25-43) and Sweatt et al teach the apparatus wherein the light is catalytic (Column 4, lines 45-57). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 46, Goldberg et al teach the apparatus wherein the light is catalytic (Column 17, lines 25-43) and Sweatt et al teach the apparatus wherein the light is catalytic (Column 4, lines 45-57). However, it is noted that the recitation "catalyzes a reaction" is functional language which does not describe or define structural properties of the apparatus.

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Regarding Claim 47, Goldberg et al teach the apparatus wherein the light is catalytic (Column 17, lines 25-43) and Sweatt et al teach the apparatus wherein the light is catalytic (Column 4, lines 45-57). However, it is noted that the recitation "crosslinks a molecule" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 48, Goldberg et al disclose an apparatus comprising a light source, a mirror positioned to redirect light from the light source toward a substrate, a reaction chamber disposed on the substrate, one or more reactant lines connected to the chamber (Fig. 4A, #307, and #306 and Column 15, lines 56-65), one or more reaction chemicals connected to the reactant lines and a computer connected to and controlling the mirror and the supply of reactants (Column 15, lines 13-65; Column 16, line 55-67; and Fig. 3A, 4A and 4C). Goldberg et al teach the apparatus comprises mirrors (Column 15, lines 15-19) but they do not specifically teach the mirrors are micromirrors. Sweatt et al teach the similar apparatus wherein the mirrors are micromirrors which replace the need for masks traditionally used in lithography (Column 2, lines 39-65). It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the micromirrors of Sweatt et al to the mirrored light direction of Goldberg et al thereby eliminating the need for masks the problems resulting from masks i.e. alignment and mask defects as taught by Sweatt et al (Column 2, lines 1-12).

Regarding Claim 49, Goldberg et al teach the apparatus wherein the light source comprises a UV light (Column 17, lines 14-15) and Sweatt et al teach the apparatus wherein the light source is UV light (Column 6, lines 25-40).

Regarding Claim 50, Goldberg et al teach the apparatus further comprising a lens (Column 15, lines 15-19).

Regarding Claim 51, Goldberg et al teach the apparatus wherein the lens comprises a lens system which changes magnification of light reflected by the micromirror (Column 26, lines 58/-65).

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Regarding Claim 52, Goldberg et al teach the apparatus comprises mirrors (Column 15, lines 15-19) but the do not specifically the mirror is a micromirror array. However, Sweatt et al teach the similar apparatus wherein the micromirror is a micromirror array (Column 2, lines 38-65).

Regarding Claim 53, Goldberg et al teach the apparatus wherein the light is catalytic (Column 17, lines 25-43) and Sweatt et al teach the apparatus wherein the light is catalytic (Column 4, lines 45-57). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 54, Goldberg et al teach the apparatus wherein the light is catalytic (Column 17, lines 25-43) and Sweatt et al teach the apparatus wherein the light is catalytic (Column 4, lines 45-57). However, it is noted that the recitation "catalyzes synthesis" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 55, Goldberg et al teach the apparatus wherein the light is catalytic (Column 17, lines 25-43) and Sweatt et al teach the apparatus wherein the light is catalytic (Column 4, lines 45-57). However, it is noted that the recitation "catalyzes a reaction" is functional language which does not describe or define structural properties of the apparatus.

Regarding Claim 56, Goldberg et al teach the apparatus wherein the light is catalytic (Column 17, lines 25-43) and Sweatt et al teach the apparatus wherein the light is catalytic (Column 4, lines 45-57). However, it is noted that the recitation "crosslinks a molecule" is functional language which does not describe or define structural properties of the apparatus.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

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improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 39-56 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,295,153.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to an apparatus for catalyzing a reaction on a substrate comprising a light source, a computer-controlled micromirror and a reaction chamber. The claims differ only in the patent claims are further drawn to a diffusion lens. However, the open claim language "comprising" recited in the instant claims encompasses any additional components in the patent claims. Furthermore, because the instant claims encompass the patented apparatus, the instantly claimed apparatus is a genus of the patent species.

The courts have stated that a genus is obvious in view of the teaching of a species see *Slayter*, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); and *In re Gosteli*, 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989). Therefore the instantly claimed apparatus (i.e. genus) is obvious in view of the '153 (i.e. species) apparatus.

Conclusion

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14. No claim is allowed.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (703) 306-5878. The examiner can normally be reached on 6:30 TO 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (703) 308-1119. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-8724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.



BJ Forman, Ph.D.
Patent Examiner
Art Unit: 1634
June 24, 2003